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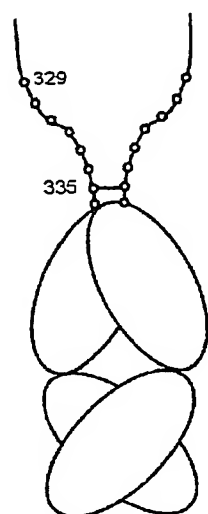
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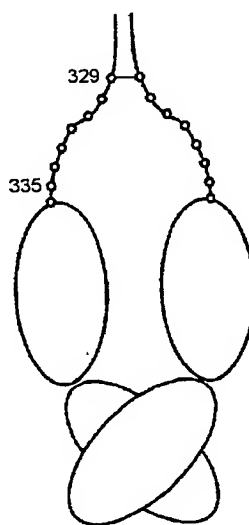
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(54) Title: MUTANTS OF IgE PROTEINS AND USES THEREOF



Cys 335
Closed
Conformation

a



Cys 329
Open
Conformation

b

(57) Abstract: The present invention generally relates to mutant IgE proteins. Specifically, the present invention relates to modified IgE proteins that have reduced flexibility in their heavy chains in comparison to unmodified IgE proteins and are, as a result, constrained in a particular conformational state. The present invention also relates to three-dimensional models of IgE glycosylation mutants. The present invention also relates to the use of proteins of the instant invention to produce and isolate compounds that will inhibit the binding of IgE protein to FcεRI or FcεRIα. Also included in the present invention are nucleic acid molecules encoding proteins of the instant invention. Also included are compounds which inhibit the binding of IgE to its receptor. The present invention also includes therapeutic compositions and kits comprising proteins and/or compounds of the instant invention as well as methods of treating an animal using such compositions and kits.



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